III. REMARKS

Claims 1-36 are pending. Claim 24 is amended

In making the 35 U.S.C. 112, first paragraph rejection the Examiner states that "it is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable". Constant v. Advance Micro-Devices Inc., 7 USPQ2d 1064. However, this quote cited by the Examiner has nothing to do with 35 U.S.C. 112, first paragraph. This quote pertains only to limitations found in the specification which are not presented in the claims for purposes of anticipating a claim. Id. Thus, the Examiner's rejection is unfounded and appears to be based solely on a misunderstanding of what is being claimed.

"The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue quoting 2164.01 United States experimentation" (MPEP v. Telectronics, Inc., 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988)). It is noted that the "authentication dialog box" found at, page 14, line 26 through page 15 line 2 of Applicant's specification and as described in Applicant's previous response is only one non-limiting example of language that supports the phrase "different data". Other examples of the "different data" can be found at page 16, line 6 through page 17, line 26 and in Figure 5. For example, the recalibration messages send by the remote user appear as suggestions on the display of the tool (page 16, lines 26-30). In another example, data resulting from an active request is sent by the module (page 17, lines 20-26). In other words the different data can be considered data

resulting from or based on a processing of the "first data" by the "module".

It is further noted that the Examiner appears to be reading Applicant's claim language, "the module being configured to receive and process a first data from the remote network and send a different data to the local network based on the first data received from the remote network" as recited in Applicant's claim 1 in a vacuum and not in conjunction with the remainder of the claim which recites "and to transmit a second data from the intermediate network to the remote network where the second data is related to a predetermined condition of equipment identified by the module." This claim language interpreted in light of the portions of Applicant's specification cited above is perfectly clear to one skilled in the art. If the Examiner considers the claim as a whole it will be found that data (i.e. the second data) is sent back to the remote network in response to the first Therefore, the rejection under 35 U.S.C. 112, first data. paragraph should be withdrawn. The rejection of claims 6 and 11 under 35 U.S.C. 112, first paragraph should be withdrawn for reasons similar to those described above.

It is noted that the Examiner has not considered any of the claim amendments made by Applicant in response to the previous office action, but merely reasserts the previous rejection word for word. As such, Applicant repeats its prior arguments for proper consideration by the Examiner with respect to claims 1-23.

Claims 1, 2, 4-7, 9-13 and 15-23 are patentable under 35 U.S.C. 102(e) over Crist et al., U.S. Patent No. 6,879,940 ("Crist"). Claim 1 recites that the module being configured to receive and process a first data from the remote network and send a different data to the local network based on the first data received from

the remote network. This feature is not disclosed or suggested in Crist.

Crist discloses a plurality of remote client workstations (30) each having a remote access line (31). Each access line (31) connects its corresponding workstation(s) (30) to the client's local workstation (32) (Col. 6, L. 57-66; Fig. 3). The client develops a test program (Col. 4, L. 57-60) and transmits the test program from the remote workstation (30) to the local workstation (32) (Col. 6, L. 1-18). The host schedules particular times on the test system (34) for particular single clients, who may then operate the test system (34) (Col. 7, L. 12-14). The test program is then used to run the test system (34).

In Crist the data transferred between the remote workstations (30) (e.g. the remote network) and the local workstations (32) (e.g. the intermediate network) is the same data that is transferred between the local workstations (32) and the test system (34) (e.g. the local network). In Crist it is the client's test program for running the test system that is This is not what is claimed in claim 1. transferred. recites that the module being configured to receive and process a first data from the remote network and send a different data to the local network based on the first data received from the remote network. Furthermore, even if the host (36) is considered part of the local network or the intermediate network, controlling access to the test system (e.g. screening clients through a security system and scheduling access times) is not the transfer of different data as claimed by Applicant.

Claim 1 further recites that the module being configured to transmit a <u>second data</u> from the intermediate network to the remote network where the second data is <u>related to a</u>

predetermined condition of equipment identified by the module. Crist simply does not disclose or suggest this feature. Thus, claim 1 is patentable over Crist.

Claim 6 recites a module located within the intermediate network, the module being configured to receive and process data from at least one of the plurality of users of the remote network and send a <u>different data</u> to at least one of the plurality of equipment of the local network <u>based on the data received from the remote network</u>. Crist does not disclose or suggest this feature for the reasons described above with respect to claim 1. Claim 6 is patentable at least for this reason.

Further, claim 6 recites the module being further configured to allow one of the plurality of users to select at least one equipment diagnostic monitor system from a plurality of equipment Crist does not disclose or diagnostic monitoring systems. In Crist, the clients of the remote suggest this feature. workstations (30) can remotely operate only one test system (34) through a corresponding local workstation (32) (See Fig.3). clients in Crist have to arrange for a selected time during which the host computer (36) will allow the clients access to the test system (Col. 6, L. 7-10). When a particular client in Crist has scheduled time on the test system (34) all other clients are prevented from accessing the test system (34) (Col. 7, L. 4-6). Nowhere does Crist disclose or suggest allowing one of the plurality of users to select at least one equipment diagnostic monitor system from a plurality of equipment diagnostic monitoring systems. Thus, claim 6 is patentable for this additional reason.

Claim 11 is patentable for substantially the same reasons described above with respect to claims 1 and 6. Claims 2, 4, 5,

7, 9, 10, 12, 13, 15-23 and 33-36 are patentable at least by reason of their respective dependencies.

Claim 4 recites that the module exchanges data with an equipment diagnostic monitor system <u>located within the intermediate network</u> and that the equipment diagnostic monitor system has the function of monitoring at least one activity of at least one <u>tool</u> residing within the local network. These features are not disclosed in Crist.

The Examiner refers to text of column 5, lines 34-37 in making the rejection of claim 4. Column 5, lines 34-37 recite that "the test program must at some point in time be transferred to the local workstation (32, 7) in order to run the test system (34, 8) from the local workstation (32, 7)" and that the test system (8) is connected to the host's network (10) (LAN). The "test program" is located in the local workstation (32) (which the Examiner equates to Applicant's "intermediate network"). test system (34, 8) is part of the "local network" as indicated by the Examiner at page 3, item 7, lines 5-8 of the Office Action. Therefore, the test system (34, 8) of Crist is not "an equipment diagnostic monitor system located within intermediate network" as recited by Applicant.

Furthermore, the test system (34, 8) of Crist does not "monitor" a "tool". The test system (8) is itself "a machine or machines and any associated ancillary equipment used in semiconductor circuit testing" (Col. 4, L. 27-29). Thus, the test system (34, 8) is not an equipment diagnostic monitor system as recited in claim 4 for this additional reason. The test program of Crist is also not an equipment diagnostic monitor system. The test program merely operates the test system (34, 8) (Col. 5, L. 34-36). Therefore, claim 4 is patentable.

Claim 5 recites that the equipment diagnostic monitor system collects and analyzes data from tests performed on the at least one tool. Crist does not disclose or suggest this feature. Examiner again cites to the text of column 5, lines 34-37 in However, as noted above, column 5, support of the rejection. lines 34-37 merely disclose that the test program is transferred to the local workstation (32, 7) in order to run the test system The Examiner also cites to column 4, lines 15-21. 4. lines 15-21 recites that "fabless firms may desire the ability to remotely monitor, analyze, and run integrated circuit test programs during the design, debug an production phases of making a new integrated circuit". Nowhere in these cited passages, nor anywhere else in Crist is it disclosed or suggested that an "equipment diagnostic monitor system collects and analyzes data from tests performed on the at least tool". Thus, claim 5 is patentable. This argument applies equally to claims 9 and 15.

recites a security module located within the Claim 12 intermediate network, through which data transferred between the local network and the remote network passes. This feature is not disclosed in Crist. Crist discloses that "the data and test programs for each of the individual clients are typically separated by a series of firewalls (33) (Col. 7, L. 1-3). Nowhere is it disclosed or suggested that the firewalls (33) are located in the local workstations (32) (i.e. the Examiner's intermediate network). Rather figure 3 of Crist clearly show the firewalls (33) being separated from the local workstations (32). Thus, the firewall (33) of Crist is not a security module located within the intermediate network as recited in claim 12. Therefore, claim 12 is patentable.

Claim 17 recites that the <u>user on the remote network</u> sends a <u>suggestion regarding an operation</u> of the at least one item being monitored to an entity managing the at least one item on the local network. This feature is not disclosed or suggested in Crist. The Examiner cites to column 6, lines 14-38 in support of this rejection. Column 6, lines 14-38 discloses that the client accessing the test system (8) may request technical assistance from the host and nothing more. There is no disclosure whatsoever that the client send a "suggestion regarding an operation of the at least one item being monitored" as recited in claim 17. Thus claim 17 is patentable.

Claim 18 recites that the equipment diagnostic monitor system sends an alert to a predetermined entity when an analysis of data received from the at least one item indicates that the at least one item is operating outside of a predetermined performance Nowhere is this feature suggested or disclosed in Crist. range. The Examiner cites to column 4, lines 15-21 of Crist in support of this rejection. This cited passage of Crist merely recites "in order to speed development and reduce cost in semiconductor manufacturing, companies such as fabless firms may desire the ability to remotely monitor (such their own as physical facilities), analyze, and run integrated circuit test programs during the design debug and production phases of making a new integrated circuit". Thus, claim 18 is patentable.

Claim 19 recites a remote control proxy server in the intermediate network that is between the local network and the remote network that prevents direct IP routing of a device in the local network that is being accessed by the remote network. Nowhere is this disclosed or suggested in Crist. The Examiner refers to the host network (36) of Crist as being the remote

control proxy server recited by Applicant. However, the host network (36) is clearly not in the local workstation (32) (i.e. the Examiner's intermediate network) nor does Crist disclose or suggest that the host network (36) "prevents direct IP routing of a device in the local network that is being accessed by the remote network". Therefore, claim 19 is patentable.

Claim 21 recites that the intermediate network further comprises an equipment diagnostic monitor system that monitors and analyzes the semiconductor tool. Claim 20 is patentable over Crist for reasons similar to those described above with respect to claim 4.

Claim 22 recites that the equipment diagnostic monitor system controls tests performed by software within the semiconductor tool, saves data from the tests and sends out alerts to a remote user via the remote network when the semiconductor tool is operating outside a predetermined performance range. Claim 22 is patentable over Crist for reasons similar to those described above with respect to claim 18. Further, in Crist the software (i.e. test program) for controlling the test system (34) is located in the local workstation (32) not the test system (34).

Claims 3, 8 and 14 are patentable under 35 U.S.C. 103(a) over Crist in view of Reid et al., U.S. Patent No. 6,182,226 ("Reid"). It is submitted that because Crist does not disclose all the features of independent claims 1, 6 and 11 the combination of Crist and Reid cannot as well. Thus, claims 3, 8 and 14 are patentable at least by reason of their respective dependencies.

Further, claim 3 recites that the module hides the IP addresses of the <u>remote network</u> and the <u>local network</u> from each other. It would not be obvious to one skilled in the art to combine Crist with Reid to achieve what is claimed by Applicant. The firewall

(33) of Crist is located between what the Examiner is calling the local network (i.e. the camera 11 and the test system 34; Fig. 3) and the intermediate network (i.e. the local workstations 32; Fig. 3). The local workstations (32) of Crist are located at the host's facility (Col. 6, L. 15-18) and are the first workstations the data flow from the client encounters in operating the test The firewall (33) is located between the local system (34). workstations (32) and the host network (36) and also the test system (34). The host network (36) and test system (34) are also located at the host's facilities (Col. 6, L. 15-38). Because the firewall (33) is located down stream from the workstations (32) and because the host has access to the workstations (32) (Col. 6, L. 28-31) the host also has access to the client IP address via the local workstations (32). Thus, the combination of Crist and Reid does not disclose or suggest hiding the IP addresses of the remote network and the local network from each other as recited in claim 3. Claims 8 and 14 are patentable for reasons similar to those described above with respect to claim 3.

With respect to the new rejections presented by the Examiner with respect to claims 24-32:

Claims 24 and 28-32 are patentable under 35 U.S.C. 102(e) over Pasadyn et al. (U.S. Pub. No. 2005/0221514, hereinafter "Pasadyn"). Claim 24 recites that the equipment diagnostic monitor system is configured to allow a user of the remote network to remotely control a diagnostic test performed on the equipment for monitoring a health of the equipment. This features is not disclosed or suggested in Pasadyn.

Pasadyn merely calls for the passive collection of data from the processing tool during the processing of a first group of workpieces. The data is analyzed so that operating

characteristics of the tool can be changed to improve the quality (Para. 0043 and 0059). of the next run of workpieces. example, in Pasadyn one or more parameters of the processing performed on the workpiece 1205 in the processing tool 1210 are sampled (Para. 0066). Outputs of tool sensors measuring these parameters are sent to computer 1230 for analysis to identify the characteristic parameters (Para. 0067). The characteristic parameters are modeled and the model is applied to modify at least one processing control input parameter (Para. 0068 and In another example, Pasadyn discloses that after the process step in the processing tool 1310 is concluded the semiconductor workpieces 1305 are examined at a review station Once errors are determined from the examination of the workpieces 1305, the processing control inputs on the line 1320 are modified for a subsequent run of a lot of workpieces 1305. Nowhere does Pasadyn disclose or suggest the equipment diagnostic monitor system is configured to allow a user of the remote network to remotely control a diagnostic test performed on the equipment for monitoring a health of All that Pasadyn discloses is that the adaptive equipment. sampling processing modeling of the monitored sensor data may be used to alert an engineer of the need to adjust the processing performed (Para. 0059) and nothing more. Thus, claim 24 is patentable over Pasadyn at least for this reason.

Further claim 24 recites that the intermediate network is configured to receive and selectively process data from the remote network depending on a set of predetermined criteria applied by the intermediate network and send the processed data to the local network. This features is not disclosed or suggested in Pasadyn. The Examiner considers the computer 1330 (Figs. 13 and 14 of Pasadyn) to be the intermediate network,

however, there is absolutely no disclosure in Pasadyn of the computer 1330 or any other component of the system in Pasadyn selectively processing data from the remote network depending on a set of predetermined criteria applied by the intermediate network and sending the processed data to the local network as recited in Applicant's claim 24. Thus, claim 24 is patentable over Pasadyn for this additional reason.

Claims 28-32 are patentable at least by reason of their respective dependencies.

Furthermore, claim 29 recites that the equipment diagnostic monitor system is configured to execute or ignore a request from the user on the remote network based on a set of predetermined criteria, wherein the user requests that tests be performed on the equipment, and that other data be uploaded from previous tests performed on the equipment. Nowhere is this feature disclosed or suggested in Pasadyn. Paragraph 0069 of Pasadyn cited by the Examiner in the rejection of claim 29 refers merely to data extracted from database 1235 by computer 1230 where the data pertains to models of characteristics of processing parameters of the processing tool 1210. If the database 135 doesn't contain an appropriate model the characteristic parameter may be ignored or the computer system may attempt to develop one. None of the characteristic parameters (or metrology events) disclosed in paragraph 0069 of Pasadyn are disclosed as being "user requests". Rather the adaptive sampling processing modeling of performs system Pasadyn the obtaining characteristic parameters, model generation and performance of metrology events automatically. For example, in paragraph 0359 Pasadyn discloses that the process control server may initiate pre-processing and/or post processing metrology events as

necessary to determine the operating states of the tools for directing the path of a lot of wafers through the tools 3030-3080 (See also Para. 0358). Paragraph 0068 of Pasadyn also states that the computer system 1230 is programmed to model the characteristic parameters. Nowhere, does Pasadyn disclose or suggest "the equipment diagnostic monitor system is configured to execute or ignore a request from the user on the remote network based on a set of predetermined criteria, wherein the user requests that tests be performed on the equipment, and that other data be uploaded from previous tests performed on the equipment" as recited in claim 29. Thus, claim 29 is patentable for this additional reason.

Claim 30 recites that the local network is configured to receive and display a suggestion from the user on the remote network regarding the operation of the equipment being monitored on the local network. Nowhere is this disclosed or suggested by Pasadyn. Applicant fails to see how paragraph 0078 of Pasadyn anticipates claim 30 as paragraph 0078 do not disclose any type of "suggestion from the user on the remote network". All that paragraph 0078 discloses is that the semiconductor workpieces 1305 are examined at a review station 1317 and nothing more. The review of the workpieces facilitates the determination of errors so that the control signals can be modified to improve the next processing performed by the processing tool 1310. Thus claim 30 is patentable.

Claims 25-27 are patentable under 35 U.S.C. 103(a) over Pasadyn and Cunningham et al. (U.S. 2002/0132607, hereinafter "Cunningham"). It is submitted that because Pasadyn fails to disclose or suggest all the features of claim 24 from which claims 25-27 depend that the combination of Pasadyn and

Cunningham cannot as well. Thus, claims 25-27 are patentable at least by reason of their respective dependencies.

It is further submitted that that Pasadyn and Cunningham have been combined improperly. References may be combined under 35 U.S.C. 103(a) only if the references are analogous art. In this case Cunningham is not analogous art. A reference is analogous art if:

- 1) The reference is in the same field of endeavor as the applicant's; or
- 2) The reference is reasonably pertinent to the particular problem with which the applicant was concerned.

Cunningham is neither in the same field of endeavor as the Applicant's nor is it reasonably pertinent to the particular problem with which the Applicant was concerned. Cunningham relates reducing the congestion in wireless communication systems and nothing more. Cunningham does not address a system for accessing data from a remote network for the monitoring of the health of equipment on the remote network.

All that Cunningham discloses is an unsolicited message reduction system that includes a message detector and an all points bulletin (APB) generator. The message detector applies predefined filtering rules to identify and act upon unsolicited email messages to reduce the total number of transmissions in the wireless communication system. The filtering rules include global and user rules, with the global rules normally having precedence over user rules. The APB generator allows messages to be sent wireless mobile communication devices through direct wireless messages instead of through email messages. This clearly is not the same filed of endeavor as Applicant's nor is

it reasonably pertinent to the problem solved by Applicant's claims.

Since Cunningham is not in the same field of endeavor and is not reasonably pertinent to the particular problem with which Applicant was concerned, Cunningham is not analogous Therefore, Pasadyn may not be properly combined with Cunningham.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

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